

**2014
UTAH BOARD OF OIL, GAS AND MINING
EARTH DAY AWARDS**

Nomination Form

Nominee Information

Company Name	Anadarko Petroleum Corporation
Address	1368 S 1200 E
City, State, Zip	Vernal, UT 84078
Contact Person	Lynn Hadlock
Phone	1-435-781-9759
Site Name	Greater Natural Buttes Field
Location	Uintah Basin, Utah

Activity and Category (Please check one activity and one category)

Activity

- **Oil and Gas - Anadarko Greater Natural Buttes: Reduced Trucking with Pipeline Transport and Automated Leak Detection**
- **Minerals**
- **Coal**

Category

- **Environmental improvement to an active mine site, drilling or recovery site, or field**
- **Outstanding results following applications of innovative environmental technology**
- **Outstanding final reclamation or site restoration**
- **Best practices – Pipelining and automated leak detection to protect natural resources**
- **Other** _____

Nominated By



Name	Karen McGuire Regulatory Affairs Engineer Anadarko Petroleum Corporation
Address	1099 18th Street, Suite 1800
City, State, Zip	Denver, CO 80202
Phone	720-929-6503

Nomination Summary (attach additional sheets, photos, etc., as necessary)

The Greater Natural Buttes (GNB) Field operated by Anadarko Petroleum Corporation has significantly transitioned over the last three years from trucking to pipelining produced water for disposal. This has greatly reduced truck traffic, air emissions and dust. The Saltwater Disposal (SWD) system now transports ~40,000 BWPD through approximately 65 miles of buried pipeline. To protect sensitive natural resources, an automated leak detection system was installed in critical sections of the pipeline system, including two major crossings of the White River and two crossings of the Bitter Creek drainage.

This work was initiated by a core team comprised of operations, engineering and automation. This was not a State regulatory requirement. Increased pipelining and successful implementation of the leak detection system demonstrates Anadarko's commitment to best practices and applying technology to operate in an environmentally safe manner.

Return no later than January 31, 2014 to: Earth Day Awards, Division of Oil, Gas and Mining, 1594 West North Temple, Suite 1210, P.O. Box 145801. Salt Lake City, Utah 84114-5801. Phone (801) 538-5324 Fax (801) 359-3940. Nominations may also be submitted electronically, email to jimspringer@utah.gov



**GREATER NATURAL BUTTES:
REDUCED TRUCKING WITH PIPELINE TRANSPORT AND
AUTOMATED LEAK DETECTION**

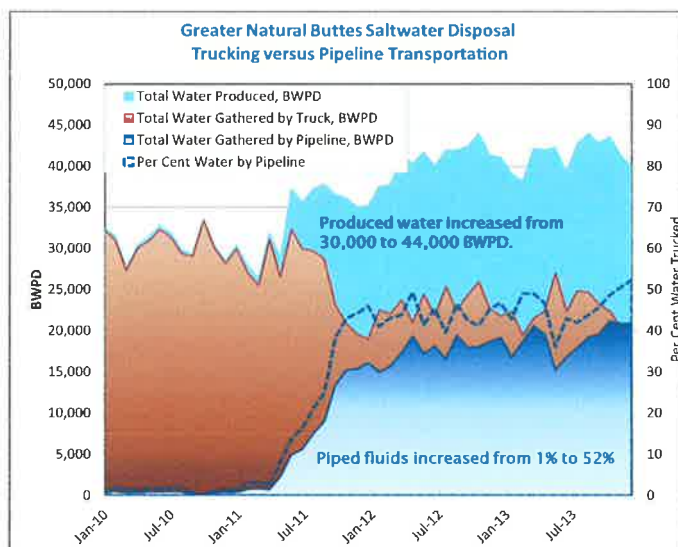
Anadarko Petroleum Corporation Nomination
2014 Utah Board of Oil, Gas and Mining Earth Day Award

January 31, 2014

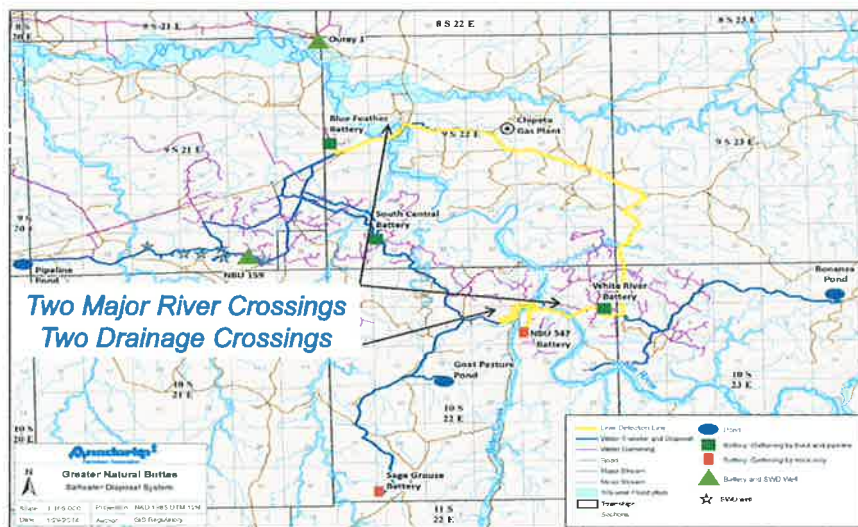
Greater Natural Buttes Field Best Practices

- **Reduced produced water trucking by 50% with installation of gathering lines**
 - ♥ Eliminated the dust associated with 17 trucks operating 24 hours daily: 15 tons annually
 - ♥ Reduced NOx gas emissions by 5 tons annually
- **Installed automated pipeline leak detection in saltwater disposal system to protect river crossings, drainages and other natural resources**

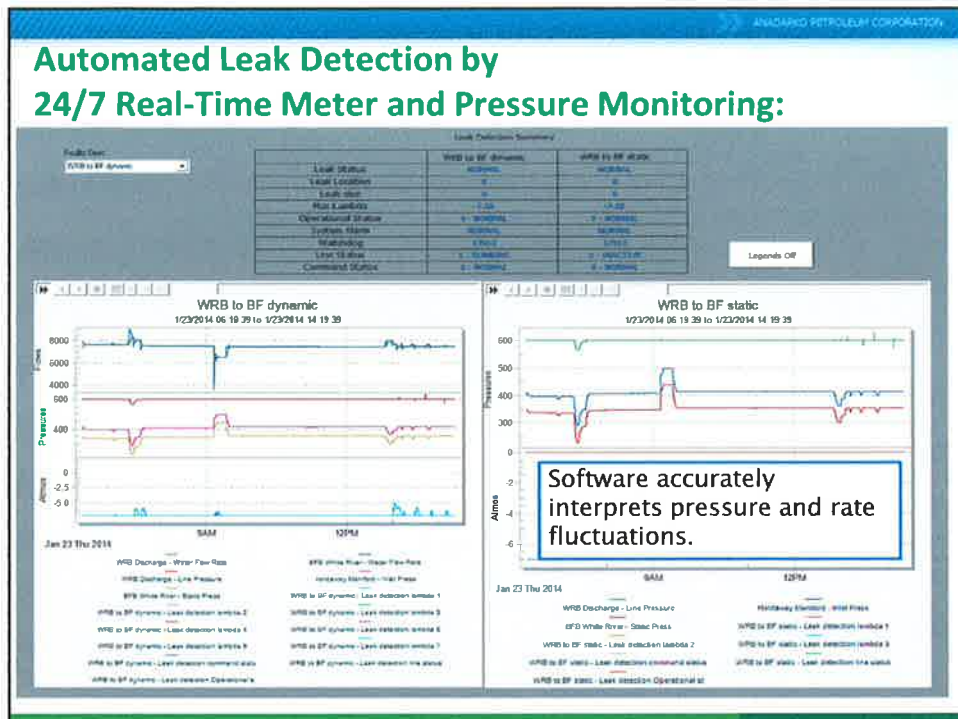
Water Gathering since 2010: Increased Pipeline Transport to 50% of Total



Leak Detection Installation Completed in 2013 Automated System Shut-Down within Minutes



Automated Leak Detection by 24/7 Real-Time Meter and Pressure Monitoring:



Anadarko Best Practices

- Commitment to Reduced Emissions
- Commitment to Application of New, Effective Technology
- Commitment to Protecting Natural Resources



THANK YOU

Greater Natural Buttes Operations Team